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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: McBain et al.

Examiner:

Serial No.: 09/974,644

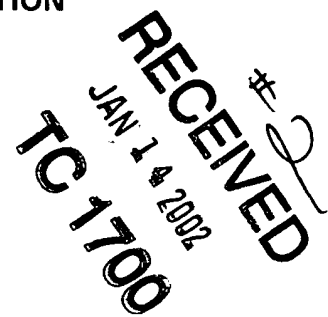
Group Art Unit:

Filed: 10/09/01

Date: December 18, 2001

For: **OPTIMIZATION OF IN-MOLD COATING INJECTION  
MOLDED THERMOPLASTIC SUBSTRATES**

Commissioner of Patents & Trademarks  
Washington, D.C. 20231



CERTIFICATE OF MAILING

Sir:

The undersigned hereby certifies that the attached **INFORMATION DISCLOSURE STATEMENT AND PTO FORM 1449 AND 39 REFERENCES** were mailed to Commissioner of Patents & Trademarks, Washington, D.C. 20231 with sufficient first-class postage, no special handling, on **December 18, 2001**, before 5:00 PM, thereby ensuring that such document(s) will be in the hands of the U.S. Postal Service by the close of business this day.

The Commissioner is hereby authorized to charge any fees which might be required or credit any overpayment of fees with regard to the attached document(s) to Account No. **07-1045**.

Respectfully submitted,

HUDAK & SHUNK CO., L.P.A.

By: Debbie Perkins

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Akron, OH 44308-1133  
(330) 535-2220  
Attorney Docket No.: GT-5331

(GC-FS-CIP)

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Assistant Commissioner for Patents  
Washington, D.C. 20231

**INFORMATION DISCLOSURE STATEMENT**

Sir:

This invention relates to a process for producing an injection-molded thermoplastic workpiece having a thermoset coating bonded thereto, comprising the steps of introducing in three stages into a closed mold a thermoplastic material, such as a polyolefin, heated to a temperature above its melting point and molding said material to form a workpiece; cooling the workpiece to a temperature less than its melt temperature then introducing a thermoset coating composition into the closed mold to cover at least a portion of a surface of the workpiece. The mold is then opened and the workpiece is removed after the coating composition has at least partially cured. The invention is also directed to a molded article made by the described process.

As authorized and encouraged under 37 C.F.R. §1.97-1.99, applicant hereby cites as a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the following patents and/or documents, copies enclosed, which the Examiner should consider with respect to the above-identified United States Patent Application:

RECEIVED  
JAN 14 2002  
TC 1700

U.S.		
PATENT/DOCUMENT NO.	DATE	NAME/COUNTRY
4,076,788	February 28, 1978	Ditto
4,081,578	March 28, 1978	Van Essen et al.
4,189,517	February 19, 1980	Shanoski et al.
4,222,929	September 16, 1980	Shanoski et al.
4,316,869	February 23, 1982	Van Gasse
4,331,735	May 25, 1982	Shanoski
4,350,739	September 21, 1982	Mohiuddin
4,366,109	December 28, 1982	Svoboda
4,414,173	November 8, 1983	Cobbledick et al.
4,515,710	May 7, 1985	Cobbledick
4,668,460	May 26, 1987	Ongena
4,798,697	January 17, 1989	Nohara et al.
4,921,669	May 1, 1990	Vetter et al.
4,963,312	October 16, 1990	Müller
5,053,177	October 1, 1991	Vetter et al.
5,084,353	January 28, 1992	Cobbledick et al.
5,132,052	July 21, 1992	Cobbledick et al.
5,359,002	October 25, 1994	Cobbledick et al.
5,391,399	February 21, 1995	Cobbledick et al.
5,496,509	March 5, 1996	Yamamoto et al.
5,562,979	October 8, 1996	Easterlow et al.
5,614,581	March 25, 1997	Cobbledick et al.
5,632,949	May 27, 1997	Fisher et al.

5,639,403	June 17, 1997	Ida et al.
5,658,672	August 19, 1997	Lenke et al.
5,736,090	April 7, 1998	Yamamoto et al.
5,777,053	July 7, 1998	McBain et al.
5,882,559	March 16, 1999	Eckardt et al.
5,902,534	May 11, 1999	Fujishiro et al.
5,906,788	May 25, 1999	Boeckler
6,180,043	January 30, 2001	Yonemochi et al.
<b>FOREIGN DOCUMENTS</b>		
<b>PATENT/DOCUMENT NO.</b>	<b>DATE</b>	<b>COUNTRY</b>
PCT/CA01/00534	April 20, 2001	PCT
<b>OTHER</b>		
The Sabreen Group, Inc.'s "Preparing Plastics for Painting" article. ✓		
Chlorocarbons and Chlorohydrocarbons-C <sub>2</sub> to Combustion Technology, Kirk-Othmer Encyclopedia of Chemical Technology, Fourth Edition, Volume 6, (1993), pp. 676-690. ✓		
GE Plastics Processing Guide, GE Engineering Thermoplastics Injection Molding Processing Guide, General Electric, 1998, pp. i-iv ✓		
GE Injection Molding Mold Design, GE Engineering Thermoplastics Injection Molding Processing Guide, General Electric, 1998, pp. 1-1 – 1-24 ✓		
GE Injection Molding Processing, GE Engineering Thermoplastics Injection Molding Processing Guide, General Electric, 1998, pp. 2-1 – 2-12. ✓		
GE Injection Molding Troubleshooting Guide, GE Engineering Thermoplastics Injection Molding Processing Guide, General Electric, 1998, pp. 3-1 – 3-7. ✓		
Long Fiber Reinforced Thermoplastics, Injection Molding Guide, Celstran, 1999, pp. 1-27 ✓		

Copies of the publications are included for the express purpose of providing the Patent and Trademark Office with an ample opportunity to evaluate the same and to arrive at an independent assessment of its materiality, if any, with regard to the

examination of the application.

In reviewing the enclosed copies of the above publications, the Examiner is requested to ignore any underscoring or highlighting which may appear because such markings may or may not have any relationship to the subject matter of the above-identified application. The copies being submitted with this Information Disclosure Statement are the best copies available at this time.

Applicant is providing the Examiner with the following information, which the Examiner should consider with respect to the above-identified United States Patent Application:

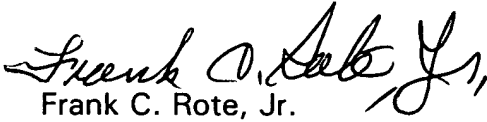
More than one year prior to the filing date a third party privately suggested/requested that one of the inventors of the subject application attempt to in-mold coat a thermoplastics substrate. This fact is brought to the Examiner's attention in that it may be considered to be prior art.

Assuming for purposes of discussion only that the suggestion/request is prior art then the question is, is it relevant. It is applicant's opinion that this art, if in fact it be prior art, is less relevant than art cited in the previously submitted IDS, namely U.S. Patent 5,736,090. That patent in column 1, lines 11 through 19 discloses the in-mold coating of a thermoplastic substrate. The description of the patent contains somewhat more detail than was contained in the suggestion/request vis-à-vis the instant invention.

An examination of the present application considering the above is requested.

Respectfully submitted,

HUDAK & SHUNK CO., L.P.A.

  
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